ANÆSTHETIC AGENTS.

THE

RESPECTFUL NOTICE, PROTEST AND MEMORIAL

OF

W. T. G. MORTON, M. D.,
DISCOVEROR AND PATENTEE OF ETHERIZATION,

ADDRESSED TO

HIS EXCELLENCY THE PRESIDENT, THE HONOR ABLE SECRETARIES OF THE TREASURY, WAR, NAVY, AND INTERIOR,

TOUCHING THE USE OF HIS DISCOVERY IN THE PUBLIC SERVICE.

IN VIOLATION OF HIS VESTED RIGHTS UNDER THE LETTERS PATENT OF THE UNITED STATES.

> WASHINGTON: GEO. S. GIDEON, PRINTER. 1854.



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WOA: M891ac 1854 To His Excellency The President of the United States, and The Honorable The Secretary of War,

THE SECRETARY OF THE NAVY, and

THE SECRETARY OF THE TREASURY of the United States.

The undersigned, Wm. T. G. Morton, M. D., respectfully represents and makes known—That he, the undersigned, is the original and first discoverer of Practical Anæsthesia, and that he holds the letters patent of the United States for said discovery and for certain means of applying the same; which said letters patent bear date the twelfth day of November, in the year 1846, and do grant to the undersigned and his assigns, for the term of fourteen years from the date thereof, the exclusive right and liberty of using, and vending to others to be used, the said discovery of Practical Anæsthesia; to which said letters patent

of record in the U.S. Patent Office he respectfully refers.

The undersigned, from motives which must be apparent from the nature of the subject, and re'ying upon the justice and magnanimity, first, of his own government, and then of all other civilized governments, has not hitherto exercised his legal rights by suits at law for damages, or injunctions to prevent the use of a discovery which has happily proved so beneficent to humanity. Nor would he now take any step by way of departure from his previous course, but that his forbearance is sought to be turned to his disadvantage, and objection is made to granting compensation by an act of Congress, on the ground that he ought to enforce his right under his patent against the officers of the United States using his discovery in the Military, Naval and Marine service, and against all persons violating the same.

These considerations have determined the undersigned to adopt this course. He therefore with great reductance respectfully asks, that the encouragement given to private individuals to violate his patent, through the non-observance thereof by the government itself, may be no longer continued, and that the honorable Secretaries will either purchase the right to use said discovery in the respective branches of the public service, or that they will immediately issue the necessary orders to the medical officers and others under their official control to desist from

further infringing his patent right in the premises.

WM. T. G. MORTON, M. D.

Washington, June 15, 1854.

The undersigned members of the Senate and House of Representatives concur in recommending that the right to use Dr. Morton's discovery, commonly called "Practical Anæsthesia," be purchased for the public service, or that the use thereof be discontinued, because the government is manifestly bound by its own patent duly issued to respect Page 182 of Mrs.

the said discovery as private property, and because "private property" ought not to be "taken for public use without just compensation."

James C. Jones, Ben. Fitzpatrick, S. Adams, Jas. Shields, J. D. Bright, J. P. Walker, J. B. Thompson, Chas. T. James, H. Hamlin, Charles Sumner, Julius Rockwell, James Cooper, W. M. Gwin, C. C. Clay, jr., J. M. Clayton, †John B. Weller,

J. W. Williams, Philip Allen, A. G. Brown, W. K. Sebastian, Samuel Houston, R. W. Johnson, Arch. Dixon, Geo. W. Jones, Jno. Bell, J. P. Bejamin Henry Dodge, A. C. Dodge, B. F. Wade, S. P. Chase, †S. R. Mallory, †William H. Seward

M. S. Latham, W. R. Sapp, Hendrick B. Wright, Jacob Shower, T. R. Westbrook, R. H. Stanton, Alex. De Witt, Sam'l P. Benson, C. M. Straub, Sam'l Mayall, John B. Macy, E. W. Farley, Wm. Cullom, John Wheeler. Wm. Barksdale, William S. Barry, James L. Orr, Em. Etheridge, Fred. P. Stanton, H. H. Johnson, W. R. Smith, H. L. Stevens, Thomas B. Florence,

James Knox, E. B. Washburne, P. H. Bell, J. A. McDougall, W. H. Witte, C. B. Curtis, Bernhart Henn, Geo. Vail, Asa Packer, D. Stuart, James Abercrombie, D. B. Wright, F. K. Zollicoffer. Daniel Mace, Gerrit Smith, A. Oliver. Charles W. Upham, Thomas D. Eliot, A. C. M. Pennington, Ner Middleswarth, I. Washburn, jr., Thomas Davis, J. Z. Goodrich,

^{*}Constitution United States, Amendment, article V.

[†] Mr. Mallory, Mr. Seward, and Mr. Weller sign under the following qualification: I respectfully suggest that the patentee of the anæsthetic agent, known as Dr. Morton's discovery, should receive from the United States a liberal compensation for their past and future use of it,

Peter Rowe W. S. Ashe, Wm. M. Tweed, W. A. Richardson, James S. Chrisman, Willis Allen, J. P. Cook, J. O. Norton, P. S. Brooks, Charles Hughes, A. B. Greenwood, C. S. Hill, John Wentworth, John C. Breckinridge, J. R. Giddings, Sam'l H. Walley, Ed. Wade, W. W. Boyce, J. C. Allen, L. M. Keitt, G. Dean, D. A. Reese, M. H. Nichols, John Kerr, Sam'l Caruthers. N. P. Banks, jr., Jared C. Peck, John Robbins, jr., B. B. Thurston, M. Oliver, Thos. M. Howe, Ben C. Eastman. R. C. Puryear, Sion H. Rogers, R. M. Bugg, W. P. Harris,

Edward Dickinson, N. G. Taylor, Richard Yates, Henry Bennett, Roland Jones, James J. Lindsley, J. S. Harrison, John G. Miller, John M. Elliot, William Preston, Wm. M. Churchwell, J. Wiley Edmands, Samuel C. Crocker. B. W. Peckham, Wm. Everhart, Thomas Richey, Joseph R. Chandler, Alvah Sabin, A. E. Maxwell, J. F. Dowdelt, T. S. Russell, Bishop Perkins, J. Glancy Jones, G. R. Riddle, H. M. Shaw, T. J. D. Fuller, Lewis D. Campbell, Daniel Wells, jr., A. W. Lamb, J. L. Taylor, George Hastings, O. R. Singleton, Thos. W. Cumming. L. M. Cox, P. Phillips, A. Harlan.

Note. - The subjoined papers are added for the purpose of exhibiting some of the evidences in the possession of the patentee, (of which he is prepared to exhibit many others,) that the subject has undergone a far more thorough investigation than usually attends, the assertion of They are presented to notice from an honest and exa patent right. cusable pride, although, for the purpose of securing his rights, they are superfluous, since it is enough, in a question between the grantor and grantee, that the patent has been granted. These papers, however, are esteemed valuable, since they show, 1st, the opinion of eminent counsel as to the validity of the patent; 2d. The proof of the use of the patent, without compensation, in the Army, Navy, and Marine hospitals, and the great value attached to it by the medical staff of the Army and Navy; 3d. The opinions of the medical profession generally, at home and abroad; and finally, the conclusions of the Massachusetts General hospital, and of committees of both Houses of Congress, after thorough examination of the whole subject. When it is observed, in connection with this, that the memorial to the Executive is endorsed by a majority of each House of Congress, it is supposed that no doubt can remain upon the subject.

Extract from Report of Select Committee House of Representatives, 1852, stating conclusions in which seven committees of the two Houses of Congress, respectively, have concurred.

Dr. Morton has, within a few days, received the expression of the Academy in the more acceptable form of their largest gold medal. The prize awarded to him, as above stated, being of an amount not absorbed by the medal, has been appropriately used in enclosing it in a suitable golden frame. On the one side of the medal, in addition to the name of the institute, is a medallion head of the Goddess of Liberty. On the reverse, surrounded by a wreath of laurel, is engraved—

"Académie des Sciences. Prix Montyon-Medicine et Chirurgie-Concours de 1847 et 1848. Wm. T. G. Morton, 1850."

Upon a full examination of the whole case, so far as time and means were afforded to your committee, they have come to the conclusion—

1st. That Dr. Horace Wells did not make any discovery of the anæsthetic properties of the vapor of sulphuric ether, which he himself considered reliable, and which he thought proper to give to the world. That his experiments were confined to nitrous oxide, but did not show it to be an efficient and reliable anæsthetic agent, proper to be used in surgical operations and in obstetrical cases.

For the rest your Committee have come to the same conclusions that

were arrived at by the Trustees of the Massachusetts General Hospital at their meeting in January, 1848, and reconsidered and confirmed in 1849, and adopted by the former Committee of the House, viz:

2nd. That Dr. Jackson does not appear at any time to have made any discovery, in regard to ether, which was not in print in Great

Britain some years before.

3d. That Dr. Morton, in 1846, discovered the facts, before unknown, that ether would prevent the pain of surgical operations; and that it might be given in sufficient quantity to effect this purpose, without danger to life. He first established these facts by numerous operations on teeth, and afterwards induced the surgeons of the hospital to demonstrate its general applicability and importance in capital operations.

4th. That Dr. Jackson appears to have had the belief that a power in other to prevent pain in dental operations would be discovered. He advised various persons to attempt the discovery; but neither they nor he took any measures to that end; and the world remained in entire ignorance of both the power and safety of ether, until Dr. Morton made his experiments.

5th. That the whole agency of Dr. Jackson in the matter appears to consist only in his having made certain suggestions, which aided Dr. Morton to make the discovery—a discovery which had for some

time been the object of his labors and researches.

(Copy.)

Washington, January 5, 1847.

Dr. W. T. G. MORTON, Boston, Mass.

DEAR SIR: Yours of the 26th ultimo was received in due course of mail, and in answer I have to say, that at the time your application for preventing pain in surgical operations was under consideration in the Patent Office, Mr. Eddy consulted me on the novelty and patentability of your discovery. I then examined the subject carefully, and gave it as my decided and candid opinion that it was novel and the legitimate object of a patent; and this opinion has only been strength-

ened by further reflection.

Under the law, any new and useful art is made the subject of a patent. This covers any discovery in modes of procedure having a useful object in view, and susceptible of being so defined as to instruct others to apply or make use of the mode of procedure. There can be no question that your discovery comes under this provision of law. It is a new mode of procedure, definite in its character, and which may be taught to others, and which, therefore, comes under the denomination of an art as defined by the ablest judges in Europe and in this country.

Before your discovery many attempts had been made to render per-

sons insensible to pain preparatory to surgical operations, by introducing in the stomach intoxicating substances; but this mode of procedure was unsuccessful. You then discovered, that by introducing into the lungs the vapors of certain substances, a different effect was produced from that of intoxication produced by the introduction of substances in the stomach, and that this effect was such as to render the patient insensible to pain; hence the use of this discovery, in connection with surgical operations, is an improvement in the art of surgery.

A discovery in the abstract is not the subject of letters patent, as the discovery of the elastic force of steam; of the pressure of the atmosphere; of the expansion of metals under the influence of caloric, &c.,

for this is the mere finding out of something existing before.

The mere discovery in these cases had no direct useful application in the arts or affairs of life, and could not be appropriated to the sole use of the discoverers; but the moment any one of them could be applied to a useful, practical purpose, then the party so applying it produces a useful result, and such application, originating in the mind of the discoverer or inventor, is no longer a discovery in the abstract of something before existing, but a new creation, which, having its origin in the mind of the discoverer, and not existing before, (for it is an artificial condition,) is, in view of the law, the property of the one who conceived it.

There can be no question that the one who first conceived the idea of intoxicating a patient, preparatory to a surgical operation, would have been entitled to a patent for his new mode of procedure; how, then, does your plan differ from his? You conceived the idea that, by introducing the vapor of certain substances into the lungs, a different condition of the nervous system was produced—viz: a state of insensibility to pain; and by connecting this mode of producing this state of insensibility to pain with surgical operations, you have produced a new and useful result, highly important in the art of surgery, the result of a new conception originating in your mind and legitimately the subject of letters patent. Your invention is the connection of the two processes or modes of operation.

Before the date of Watts's invention of the steam engine, the expansive force of steam had been applied to a piston in a cylinder, and it was well known, that by the application of cold water steam could be condensed in a vessel to effect a vacuum; and all that immortalized that great man was the union of these two ideas or modes of procedure, applying the force of steam in one vessel and condensing it in another. In a legal point of view your invention does not differ from this, which has been admitted to be patentable by all the legal knowledge of the

world, and the universal consent of civilized man.

I am, sir, yours,

(Signed)

Very respectfully,
CHS. M. KELLER,
For KELLER & GREENOUGH.

I concur in the foregoing opinion entirely, entertaining no doubt that Dr. Morton's discovery is a new and useful art, and as such the proper subject of a patent.

DANIEL WEBSTER.

Feb. 13th, 1847.

I have examined the question of the patentability of Dr. Morton's discovery of the anæsthetic properties of ether, and its applicability to surgical operations, and entertain no doubt as to the validity of the patent, or of his exclusive title thereto.

January, 1852.

mreral dis ... Berleit ..

J. M. CARLISLE, Washington.

Boston, May 17, 1854.

Having long since carefully considered this question, I do not hesitate to concur in the opinion expressed by Mr. Webster.

GEO. T. CURTIS.

BOSTON, May 12th, 1854.

The discovery of the anæsthetic properties of the vapor of ether, and the practical application thereof for the production of insensibility to pain during the performance of surgical operations upon the human body, as described in the letters patent of the United States to Dr. Wm. T. G. Morton, are, in my opinion, the proper subject matter of a patent. WILLIAM WHITING.

Boston, May 17, 1854.

I concur entire in the opinion expressed by Mr. Webster, Mr. Curtis, and Mr. Whiting, and in the conclusions of the argument in Messrs. Keller & Greenough.

R. CHOATE.

"Surgeon General's Office, March 1, 1852.

"SIR: In compliance with your verbal request to be furnished with information in regard to the employment of anæsthetic agents in the army of the United States, and also for an expression of opinion as to the value and importance of this class of remedial agents, I have to

That sulphuric either and chloroform were used to some extent in the military hospitals established at the theatre of war in Mexico, but the use of those articles was not so general as at present, for the reason that the apparatus at that time believed to be essential to their proper and safe administration was not adapted to service in the field.

"At the present moment it is believed that no surgical operation of importance is performed by the medical officers of the army without

the aid of some anæsthetic agent.

"Previous to the discovery of this new application of sulphuric ether. the annual supply of that medicine was one pound for every hundred

men. On the revision of the standard supply table, by a board of medical officers, in 1849, the pure washed sulphuric ether was substituted for the ordinary sulphuric ether, and the quantity allowed was increased one hundred per cent. At the same time another anæsthetic agent, the tincture of chloroform, commonly called chloric ether, was added to the supply table, and is now regularly furnished to the medical officers in such quantities as, in connection with the sulphuric ether, will suffice to meet all the demands of the survice in this particular.

"Although the discovery of this new therapeutic effect of sulphuric ether has led to the introduction and employment of other anæsthetic agents, this does not in any way militate against the merits of the original discovery, which I regard as one of the most important and valuable contributions to medical science, and to the relief of suffering humanity, which has ever been made; the only discovery to be compared therewith being that of vaccination, which has rendered the name of

Jenner immortal.

"Through the influence of these remedial agents, the surgeon is not only enabled to perform the most extensive and difficult operations, undisturbed by the cries and struggles of the patient; but what is of far greater importance, the patient, being rendered insensible, escapes that shock to the nervous system, which in itself is not unfrequently fatal. For this reason operations can now be performed with much more safety than heretofore, and that, too, in cases in which the attempt to perform them would have been forbidden by the general condition of the patient."

"To the physician this class of remedial agents promises to be of the greatest utility, though their application in the treatment of disease has

yet to be more fully developed.

"It will suffice at this time to allude to their employment for the relief of suffering woman in the hour of her greatest trial, and at the moment she claims our warmest sympathies. That these agents can be safely used in parturition, so as to afford full and entire exemption from pain to the mother, and with safety both to her and to the child.

has been amply demonstrated.

"In conclusion, permit me to congratulate you upon the flattering testimonial you have received from the National Institute of France for this discovery, and to express the hope, that inasmuch as it is impossible for you to derive any pecuniary benefit therefrom in ordinary course by letters patent, you may receive from your country that acknowledgment of your merit which is due to one who has conferred so great a boon upon mankind.

I am, very respectfully, your obedient servant,

W. T. G. Morton, M. D., Brown's Hotel, Washington, D. C. TH. LAWSON, Surgeon General: "NAVY DEPARTMENT, BUREAU OF MEDICINE AND SURGERY, "February 26, 1852.

"Sire: As the views of this bureau are desired in regard to the importance attached to the different anæsthetic agents by the medical officers of the Navy, it gives me pleasure to express the high sense entertained by them of their great utility, not only in surgical practice, but as powerful agents in many painful affections, which have resisted the ordinary remedies. This opinion is strengthened by the concurrent testimony of the ablest civil practitioners of our own country, with the emphatic endorsement of their value by the best British and Continental surgeons. In the absence of statistical information, accurately made up, it is somewhat difficult to estimate the relative value of these etherial preparations; but if the recorded opinions of professional men, as expressed in the various medical journals of this country and Europe, are deemed of any weight, the discovery of etherization as a means of avoiding pain in severe surgical operations may be considered the most important, in a philanthropic view, which this century has produced.

"The observation that exhilarating effects resulted from the inhalation of ether is no recent acquisition to medical science; but the novelty and gist of this discovery consists in finding that nervous perception is suspended, under the influence of etherial inhalation, and while so suspended the patient is unconscious of pain while under the opera-

tion of the knife.

"In addition to the great benefit derived from its use in alleviating pain, it has a decided effect in diminishing mortality. Its advantage in this respect appears to be in saving the system from the severe shock and nervous exhaustion which attend most of the graver surgical operations, and which of themselves often prove fatal.

"It dispels the fear of pain, which formerly prevented many from submitting to an operation, or induced them to defer it until too late.

"It enables the surgeon, also, to operate more coolly and effectually, undisturbed by the cries and struggles of the patient, which sometimes unnerve the steadiest hand, and render abortive the best directed efforts.

"The medal of the first class, awarded to you by the 'Medical Institute' of Paris, evinces the high estimation entertained, in that centre of medical science and intelligence, of the services you have rendered

to humanity.

"It is earnestly hoped that our government, with a similar appreciation of this great acquisition to medical science, will stamp their sense of its importance, by a substantial acknowledgment which, while it encourages the philanthropist in his efforts to meliorate the condition of his fellow men, will remunerate you in some measure for the toil and vexation attendant on your struggle for success.

"Respectfully, your obedient servant,

"THO. HARRIS,
"Chief of the Bureau of Medicine and Surgery.

C. Manney, M. D. Washington,"

"Mr. Wm. T. G. Morton, M. D., Washington."

SURGEON GENERAL'S OFFICE, March 10, 1852.

*Sir: The undersigned take pleasure in adding their testimony to the mass of evidence you have already accumulated in regard to the value and importance of the discovery of the anæsthetic properties of sulphuric ether, and the consequent introduction of a new class of

remedial agents into the practice of medicine and surgery.

"The more general and important advantages which surgeons and physicians, as well as patients, have derived from this great discovery, are so fully, yet concisely, set forth in the communication addressed to you a few days since by the surgeon general, as to need no repetition here, and we therefore prefer alluding to an application of this class of remedial agents, which, so far as we have seen, has not been mentioned

by your correspondents.

"We refer to their employment in the army and navy for the detection of feigned diseases. The consummate art offtimes displayed by malingerers who are desirous of procuring their discharges from the service, or to escape unpleasant duty, is such as not unfrequently to baffle the skill of the most experienced medical officers. It is not enough in these cases to suspect that disease is feigned—humanity requires that the fact of malingering be proved, before the kind offices of the physician are refused. In many instances the use of anæsthetic agents will afford this positive proof; and although we do not recommend or advocate their employment for this purpose as a general rule, we nevertheless believe that in some cases it is the duty of the medical officer to resort to them, to satisfy his doubts.

"In illustration of the foregoing remarks, we refer you to the enclosed copies of proceedings instituted in this office in January, 1849, in the case of Charles Lanke, formerly a private of artillery, who applied for a pension on account of alleged anchylosis of the knee-joint, and to whom the sulphuric ether was administered by yourself, in the presence of Dr. Edwards, of Ohio, and several other members of Con-

gress.

"Very respectfully, your obedient servant,

"H. L. HEISKELL,

Surgeon U. S. Army.

"RICH'D H. COOLIDGE,

"Ass't Surgeon U. S. Army.

"W. T. G. MORTON, M. D.,
"Brown's Hotel, Washington, D. C."

"Surgeon General's Office, January 22, 1849.

"Sir: I have the honor to acknowledge the receipt of your letter of the 18th instant, by the hands of Charles Lanke, formerly a soldier in the army, who has been charged with malingering.

"In accordance with your desire, I caused a careful examination to be made by two medical officers of the army, whose report is herewith

enclosed.

"As the most reliable means of ascertaining the true condition of this man's limb, these gentlemen endeavored to place him in a state of insensibility, by the inhalation of washed sulphuric ether. The cause of their failure in rendering him insensible is explained in their report; and I may also add, that during the short time I was called to be present, I had good reason to think that the man strongly resisted the efforts of the two medical gentlemen to render him insensible.

"Lanke has again been here this morning with an interpreter, and has had explained to him that whenever he shall consent to be rendered insensible, and it is found that his knee-joint still remains immo-

vable, he shall have the benefit of a certificate to that effect.

"Very respectfully, your obedient servant,

"By order:

H. L. HEISKELL,
"Surgeon U. S. Army.

"Hon. CHARLES BROWN, House of Reps."

"Surgeon General's Office, January 20, 1849.

"Sin: In compliance with your instructions, we have made a careful examination of the alleged disability of Charles Lanke, formerly a private of Captain Sherman's company of 3d artillery, and beg leave to report:

"That we can find no mark of severe injury received on his knee, no deep cicatrix of the integuments, and no scarification, &c., such as would have been made in the course of treatment for an inflammation of

the knee-joint.

"We can find no evidences of any injury to the bones, and express our doubt whether a simple contusion would have caused such a permanent stiffness of the joint.

"As the only means at our disposal to test the question of malingering, we endeavored to place him under the influence of the washed sulphuric ether, in order to create insensibility to our manipulations.

"This we were unable to do, the patient evidently resisting by holding his breath, &c., and, when apparently about to fall under its influence, refusing to breathe it at all, by pushing the assistant from him when about to add an additional supply of ether.

"We feel fully persuaded that the patient did use considerable muscular force, and an evident effort of will, to resist the bending of the

limb in the course of the experiment.

"As the result of our examination we would respectfully submit the following opinion: that we do not think that we should be justified in giving a certificate of disability to Charles Lanke, but still, there being a bare possibility that injustice may be done the man, we are willing to repeat the trial by ether, which is truly an 'experimentum crucis,' whenever the applicant for pension shall state his readiness to submit.

"R. H. COOLIDGE,

"Assist. Surgeon U. S. Army.
"ALEXR. S. WOTHERSPOON,
"Assist. Surgeon U. S. Army.

"Dr. H. L. Heiskell, Surgeon U. S. Army."

"Surgeon General's Office, January 26, 1849.

expressed his willingness to be rendered insensible by ether, that article was this day administered to him by Dr. Morton, of Massachusetts, in the presence of Dr. Edwards and a number of other members of Congress and medical gentlemen.

"Having come fully under its influence, the limb was completely flexed without force, proving conclusively that the stiffness of the knee-

joint was altogether feigned.

"From the mingled distress and surprise exhibited by Lanke on recovering his consciousness, on seeing his leg bent at a right angle with the thigh, it was apparent that the sudden recovery of the motion of his knee-joint was anything else than welcome.

"Yery respectfully, your obedient servant,"
"By order:

H. L. HEISKELL,
"Surgeon U. S. Army.

"Hon. CHS. BROWN, House of Reps."

"Surgeon General's Office, February 27, 1852.

"SIR: It affords me pleasure to bear testimony to the high value of

anæsthetic agents, both in the practice of surgery and medicine.

"I consider it the greatest improvement of the century. It is now an indispensable agent in the alleviation of pain during surgical operations, and in the amelioration of many distressing symptoms and diseases of daily occurrence. Its many uses are only beginning to be appreciated by the medical profession, and it is impossible to say what limits may be placed to its employment. Too much cannot be said in praise of this class of remedial agents.

"Very respectfully, your obedient servant,
"A. S. WOTHERSPOON,

"Assistant Surgeon U. S. Army.

"Dr. W. T. G. MORTON."

"NAVY DEPARTMENT, BUREAU OF MEDICINE AND SURGERY, "March 11, 1852.

[Extracts.]

"I would state, however, that in the single capital operation in which the etherial inhalation was employed by me, it was attended with the happiest results, and impressed me with such a forcible conviction of its importance, that I deem it indispensable, as a general rule, in all serious surgical cases requiring the use of the knife.

"Its application in general practice is becoming daily and more enlarged, as its peculiar influence over the nervous system and 'perceptive' powers is developed; and the physician or surgeon who banishes it from his pharmacopæia, is neglecting one of the most potent weapons

presented for his use since the great discovery of Jenner.

"Upon the whole, I have no hesitation in expressing the opinion that this discovery, when divested of the prejudices attending in some minds the introduction of all novelties, and when the accidents inseparable from its abuse or ignorant application are ascribed to their proper causes, will take its rank as among the most valuable acquisitions which have ever been made to medical science.

"With great respect, your obedient servant,
"S. R. ADDISON,
"Passed Assistant Surgeon U. S. Navy.

"W. T. G. Morton, M. D., Washington City."

Extract from Report Select Committee House Reps., 1852.

Inquiries were also instituted into its effect upon mortality, and especially of surgical operations. To be fully satisfactory, inquiries of this character should extend through a long series of years, and embrace very many cases, the results of which have been carefully observed.

The discovery being of recent origin, no opportunity for inquiries and observations to such extent has been afforded. The answers to such inquiries, where received in specific form, have embraced one class only of operations, viz: amputations of thigh, leg, and forearm. The statistics thus acquired, the committee believe to be reliable, as they are derived from the surgeons of the Army and Navy, from a few hospitals, and from eminent surgeons in civil practice. The result is appended in the following table, accompanying which will be found Prof. Simpson's European tables:

Amputations of the thigh, leg, arm, and forearm, communicated to the committee, with their results. The greater number of those in which the patients were not etherized, were performed before the discovery of the anæsthetic properties of ether and chloroform.

Not etherized.	Of whom died.	Etherized.	Of whom died.
227	40	- 185	10

No. VIII.— Table of the Mortality of Amputation of the Thigh, Leg, and Arm.

Reporter.	No. of cases.	No. of deaths.	Per cent. of deaths.
Parisian hospitals—Malgaigne	484	273	57 in 100
Glasgow hospital—Lawrie	242	97	40 in 100
General collection—Phillips British hospitals—Simpson	1369 618	487 183	35 in 100 29 in 100
Upon patients in an etherized state		71	23 in 100

Six hundred and sixty-nine cases of anæsthesia in obstetrical practice are likewise reported in Professor Simpson's work—"Anesthesia in Surgery and Midwifery"—and a tabular statement of five hundred and sixteen cases in Dr. Channing's work—"Etherization in Childbirth"—the result being highly satisfactory.

Extract from the Bulletin de L'Académie Française.

During the discussion upon anæsthetic agents, before the French Academy of Medicine, M. Debout, who followed M. Larrey, made the following remarks relative "to the influence of anæsthetic agents upon mortality following operations:"

"If it is proved that the introduction of these agents has diminished the mortality to a great degree, does not this result compensate for the few dangers to which the practice of inhalations exposes the

patients."

Some statistics drawn up by M. Burguière show, that since the introduction of these inhalations into the hospitals of Paris, the mortality for amputations, for example, was as 2:5; while previously it was as 3:5.

Professor Roux has also established, by a similar table, that the mortality at Hôtel Dieu, which was one third after large operation, had

been only one-fourth since the use of chloroform.

Professor Buisson, in an analogous work, inserted in his "Traité de la Methode Anæsthetique," shows the happy effects resulting from the

removal of pain.

But no statistical work shows better the immense progress surgery has made since the American discovery, than that published by Professor Simpson, of Edinburgh. In order to prove this, Professor Simpson requested thirty of the most distinguished surgeons of England to communicate to him; first, the results of their surgical practice for the few years immediately preceding the discovery of etherization; and, then, the results of operations which they have performed since the introduction of anæsthetic inhalations.

The following are the results of this inquiry:

Amputations considered generally, before the discovery of etherization, furnished for the last few years a considerable mortality of 1:3.37, or 29 per cent.

The amputation of the thigh gave:

Primitive, 1:1.62, or 61 per cent. Secondary, 1:3.40, or 17 per cent. 1:2.65, or 37 per cent.

Amputation of the leg:

Primitive, 1:3.08, or 32 per cent. Secondary, 1:5.87, or 17 per cent. 1:3.39, or 22 per cent.

Amputation of the arm:

Primitive, 1:4.53, or 22 per cent. Secondary, 1:4.20, or 23 per cent. 1:4.77, or 22 per cent.

The introduction of anæsthetic agents has modified these results; in fact, among 312 amputations, which M. Simpson has collected, there

were only 71 deaths, (1:4.53, or 22 per cent.;) and each amputation gave, viz:

Amputation of the thigh:

Primitive, 1:2, or 50 per cent. 1:3.92, or 25 per cent. Secondary, 1:4.84, or 30 per cent.

Amputation of the legi.

Primitive, 1:3 55, or 28 per cent. 3 1:5 13, or 19 per cent. 1:5 13, or 19 per cent.

Amputation of the arm:

Primitive, 1:425, or 23 per cent. Secondary, 1:3.37, or 29 per cent. $\{1:3.66$, or 27 per cent.

Thus, the introduction of anæsthetic agents in surgery has not changed the principal conditions of the operations, since the amputations of the thigh remain more serious than those of the arm, and the primitive amputations are always more dangerous than the secondary. But there are two general results important to notice: First, that the cipher of mortality has been materially diminished for all amputation in general, and for each amputation in particular; and then, that the difference which existed between the primitive and secondary amputations, before the discovery of etherization, has been considerably re-

duced by the employment of anæsthetic inhalations.

These results are certainly very remarkable, and very important for surgical therapeutics, and acquire more importance when we compare them with the results obtained a few years ago from particular amputations, especially those of the thigh. In the Parisian hospitals 62 per cent. of amputation of the thigh were lost; in the hospitals of Edinburgh 42 per cent.; in the Glasgow hospital 36 per cent. Thanks to etherization, this has been reduced to 25 per cent., a gain of at least eleven patients saved by this new discovery; a result which no longer leaves any doubt upon this point, that the anæsthetic agents, while they relieve the patients from pain, at the same time diminish the chances of disease and death.

Extract from Report Select Committee House Reps., 1852..

Great Britain, France, and all other enlightened nations, have, from time immemorial, rewarded munificently such services to humanity. The British Parliament, by two successive statutes, bestowed upon Jenner the sums of ten thousand and twenty thousand pounds for the discovery of vaccination. The world has as yet produced but one great improvement in the healing art deserving to be ranked with that of Jenner. America, by annihilating pain, has done as much for the benefit of the race, as England did when she furnished the instrument by which the smallpox may be finally exterminated.* It would be

^{[*} Extracts from the British and Foreign Medico-Chirurgical Review, for April, 1852.]

Applications of Anasthesia to Surgery, Midwifery, and Dentistry.—Of the desirableness of the subjugation or annihilation of pain in surgical operations, considered in itself, we cannot, on the whole, for a moment doubt; to disarm the operating table of a great portion of its terrors, is indeed a triumph of which our age may be justly proud. Not only is the actual pain of an operation thus removed, but also, in great part, that indescribable horror

unworthy our greatness, and our destiny, as the nation soon to be the most powerful on the globe, to undervalue a benefaction to mankind which is the peculiar glory of science, of our age, and of our country.

which often torments the patient for some time previously. Men of the greatest courage in other respects, and who have faced danger and death in many forms, have yet shrank from the prospect of the slow and cold-blooded tor ure they had before them from the knife of the surgeon. Indeed, however man may summon his fortitude to meet physical pain, or any other dire misfortune, we must all bow to the laws of humanity, and feel the severity of fate, in spite of the efforts of our moral nature to rise above it. But when we find that this great relief which anæsthetic agents afford is to be obtained almost without risk, and on the whole with very beneficial results otherwise, we should receive this great discovery with gratitude and exultation. So complete is the general use of anæsthetic agents, that the element of pain as an obstacle or source of danger or of terror in surgery is for ever almost destroyed. Manual and instrumental therapeutics, as a branch of materia medica, now proceeds, says M. Bouisson, "in the silence, as it were, of vegetative life, and its salutary mutilations are only made known by changes of form without any painful sensation having been experienced by the organism." True it is, as has been already shown, there are exceptions to the general rule; but they are so rare as not to militate

practically against it.

Besides the applications of anæsthesia to operations, it may be employed in surgery most usefully to favor the diagnosis of some cases. Professor Miller recommends its use in the examination of some female diseases, to save the delicacy and modesty of the pa-There are some diseases which cannot otherwise be diagnosed without pain. For instance, in some diseases of the eye there is such intense photophobia, with spasmodic contraction of the eyelids on the entrance of light into the eye, that it is very difficult to open the eyelids, so as to make a proper examination of the organ itself. In such cases, a moderate degree of anæsthesia will often overcome the resistance of the orbicularis, and destroy for a time the sensibility of the retina, so as to allow of the examination being made. In many accidents the pain renders it difficult to allow of the garments of the patient being removed, and the parts injured being properly examined. In burns it is often difficult to remove the scorched clothes, burned as it were into the skin. In many painful affections of the vagina, accompanied by constriction, it is often hardly possible to use the speculum. Cases of painful catheterism may also be adduced, and necessary exploration of the urinary canal and bladder. In such cases, and in others which can easily be imagined, as in affections of children, when the struggles of the patient afford an obstacle, and in many instances of feigned disease, as we shall see under our fourth head, the services which anæsthesia may render to diagnosis are considerable. * * *

By overcoming pain, it has caused many operations which used to be as rarely performed as possible, to come more in the way of the surgeon: the removal of nails, and the operation of the actual cautery, need no longer inspire horror to the operator or to the patient. With the view of removing muscular resistance, its use has become general in the reduction of dislocations and the operation of the taxis. * * *

The diminution of the shock to the nervous system seems to favor the healing of wounds, and altogether increases the chances of recovery. The shivering and re-active fever which often follow operations are greatly diminished by etherization; there is generally more sleep, and more complete feeling of comfort. * *

It is not necessary to point out the occasional benefit which may be derived from the use of anæsthesia in the taxis, in the reduction of dislocations, and setting of fractures. In all this class of surgical operations, cases must be continually occurring, proving to the surgeon the immense results which he may reap from the new discovery.

Anæsthesia is now used in private and in public practice, as regularly in lithotomy as in other operations. * * *

Henceforth, even the cockpit of a man-of-war, and the hospital after a field of battle, will be disarmed of half their terrors. * * *

The argument in favor of the employment of anæsthesia [in midwifery] may be summed up

1st. The removal of the pain is beneficial to the mother by preventing the nervous excitement and shock which physical pain is apt to excite, and the nervous and inflammatory reaction which, in some constructions, is apt to result.

2d. It renders many operations, requisite in complicated labors, easier of performance,

and more beneficial to the patient.

TREASURY DEPARTMENT, June 25, 1852.

Sir: I have the honor to acknowledge the receipt of your letter of the 17th instant, covering copies of a communication from the Hon. W. H. Bissell, of a letter from the Chief of the Bureau of Medicine and Surgery of the Navy, and of a letter from the Surgeon General of the Army, with certain printed matter, all relating to the memorial of Dr. Wm. T. G. Morton, asking remuneration from Congress for the discovery of the anæsthetic properties of sulphuric ether.

An attentive examination of these several documents has satisfied me that sulphuric ether and tinc'ure of chloroform are very generally used in the Army and Navy of the United States,* as anæsthetic agents,

3d. Statistics prove the practice of anæsthesia to be beneficial to the mothers, and no wise dangerous to the children. * * *

Dr. Simpson, in 1848, communicated the results obtained in 1,519 cases, and in our opin-

ion established the utility of anæsthesia [in midwifery] upon incontestable grounds. ***

Theropeutical Applications of Anæsthesia.—It is now evident that the use of anæsthetic agents is capable of an extension beyond the bounds of merely operative medicine. It has been transported into medicine itself; and perhaps this circumstance may attract the attention of the profession to the advantages which may accrue from the use of other remedies in the form of inhalations. When we consider the great extent of the pulmonary mucous membrane, and the facility with which vapors may be introduced through the respiration into the blood, it seems extraordinary that this mode of administering medicines has not been more exactly studied. * * *

Pain exists in a vast number of diseases, where even opium is insufficient to afford relief;

in such cases a field is opened to the use of anæsthetic agents. * * *

In several cases of intense facial neuralgia, benefit has been obtained from the inhalation of chloroform, when all other remedies have failed. In pains of the bowels, gastralgia, and in nervous colics, similar results have followed. Many observers have pointed out the benefit derived from doses of chloroform in the liquid form, in relieving the pain at the early stages of cholera. * * *

In tetanus many favorable cases have been reported. * * *

In mental alienation anæsthesia has been a good deal used. * * *

Anæsthetic agents have been applied locally in the way of frictions in nervous and rheumatic pains, in painful optholmia, and in orchitis. Under the hands of some it has been found exceedingly successful in relieving pain, and subduing inflammation, and in the dressing of ulcers.

It is very plain to us that we are only at the beginning of the medicinal use of these

agent

Applications to Legal Medicine.—Simulated dumbness, deafness, and stammering, can be detected.

* Extract from a report of the Surgeon General to the Secretary of War.

"During the three years immediately preceding, and the three years of peace subsequent to the Mexican war, the average annual number of wounds and injuries treated in the army has been 2,592." * * "These agents (ether and chloroform) may be useful in all the amputations, in many of the fractures not requiring amputation, in a number of luxations, gun-shot wounds, and other injuries requiring an operation; also in a number of diseases, such as strangulated hernia, calculus, homorrhoids, fistules, tumors, &c., requiring the knife, including cases of delirium tremens, and occasionally a case of parturition."

such as strangulated hernia, calculus, hæmorrhoids, fistulas, tumors, &c., requiring the knife, including cases of delirium tremens, and occasionally a case of parturition."

Dr. Richard H. Coolidge, of the Surgeon General's office, says: "I have examined the reports of sick and wounded from the army during the recent war with Mexico. I find that the number of gun-shot wounds reported amounts to 3,949, and that of all other wounds and injuries, to 5,932, making a total of 9,881; which number probably falls far

short of what actually occurred."

Extract of report of Bureau of Medicine and Surgery to the Secretary of War.

"The number of wounds and injuries of all kinds requiring medical treatment in the naval service, during the year 1850, was 1,379."

Neither of the above reports includes wounds and injuries treated in the fifteen U.S.

Neither of the above reports ancludes wounds and injuries treated in the fifteen U.S. Marine Hospitals.

and the decided testimony borne to the merits of these etherial preparations by the Chief of the Bureau of Medicine and Surgery of the Navy, and the Surgeon General of the Army, leaves no doubt upon my mind as to their great value in medical and surgical practice. In addition to the evidence thus afforded in their favor, I may mention the fact that these agents now form a part of the regular medical supply to the marine hospitals of the United States, and that they are

employed therein with very general success.

Regarding the discovery of the anæsthetic properties of sulphuric ether as, in the language of Surgeon General Lawson, "one of the most important and valuable contributions to medical science, and to the relief of suffering humanity, ever made," I concur entirely with Col. Bissell and yourself, as to the propriety and justice of liberally compensating the patentee, who has not at any time received pecuniary advantage* from his discovery, and who now appeals to the legislature of his country, on condition of the surrender of his patent for the benefit of mankind, for proper remuneration in lieu of the gains that he would have derived had he been protected in the use of the rights conferred upon him by letters patent of the Government. I therefore recommend that such reasonable and liberal sum as the committee of which you are chairman may, in their discretion, determine upon, be reported as a national compensation to Dr. Morton, and that the same be attached,

* Boston, April 20, 1852.

Dr. W. T. G. Morton—Dear Sir: As by the terms of the agreement made between yourself and me, on the 30th day of October, 1846, I am required as often as once in six months to render you an account of the net profits resulting from sales of certain patents, etc., as will appear by reference to said agreement, I have now to inform you, and do inform you, that up to this date, April 2d, 1847, I have received no net profits on account of any, and therefore can render you no further account than this, or pay to you any moneys resulting from any net profits received.

Yours, respectfully,

R. H. EDDY.

[Extract from a letter written by Caleb Eddy, esq., of Boston, to Hon. Robert C. Winthrop, Speaker of the House of Representatives 30th Congress.]

"To my knowledge he has spent large sums of money, and I think deserves some consideration in return."

[Extracts from letters written in 1848, to the Trustees of the Massachusetts General Hospital, by B. F. Brooks, an eminent lawyer, and Mr. Joseph Burnett, merchant, both of Boston.]

"I have gone somewhat into detail, that you may see the nature of Dr. Morton's embarrassments. They have grown out of his efforts in a cause which has resulted in a great public good, and he deserves a better fate than to be left to sink under them.

"Yours, truly,

BENJAMIN F. BROOKS."

"And am satisfied that he has been a loser of several thousand dollars, directly or indirectly, in consequence of his labors devoted to this object.

"JOSEPH BURNETT."

as proposed by Cot. Bissell, to the "naval appropriation bill" for the ensuing fiscal year.

I have the honor to be, very respectfully, your obedient servant, THO. CORWIN, Secretary of the Treasury.

Hon. FREDERICK P. STANTON, Chairman, &c.

WAR DEPARTMENT, Washington, June 21, 1852.

SIR: I have received your letter of the 7th instant, enclosing sundry documents relating to the memorial of Dr. William T. G. Morton, who seeks remuneration from the Government for the discovery of the anæs-

thetic properties of sulphuric ether.

In reply I beg leave to state that I have no information on the subject of this discovery other than that which I have derived from public rumor and from the documents you enclose, it being exclusively a professional question. All the information which this department could furnish the committee is contained in the letter from the Surgeon General, which is among the papers you enclose.

Judging from this information, there can be but little doubt that this discovery is one of the most valuable contributions that science has

ever made to the cause of humanity.

I do not know what the practice of the Government has been in regard to rewarding individuals for inventions or discoveries made by them, * or, at least, compensating them for the use of them in the pub-

*List of some of the Patents purchased by the departments, not including some twenty, amounting to over \$400,000, purchased by acts of Congress.

Thomas Blanchard .- For the use of several machines for turning or cutting irregular forms, constituting in the whole what is generally known as the Gun-stock Turning Machine, with the several improvements for the use of and in connection with this invention, there has been paid to Mr. Blanchard by this Department, for the privilege of using the

J. H. Hall -For the right to make and use patent breech loading rifle and carbine, and all the machinery for making the same, there has been paid to Mr. Hall and his heirs the sum of \$37,553 32.

Dr. E. Maynard, March 20, 1845.—For the right to make and use his improved lock and percussion priming for small arms, and to apply the same to 4,000 muskets, there

has been paid to Dr. Maynard \$4,000.

The right to use the invention and apply the same to a greater number of arms at a reduced scale of prices has been secured, and may be used if desirable, as follows, viz: For 10,000 muskets, \$7,500; for 20,000 muskets, \$10,000; for 100,000 muskets, \$25,000; any greater number at a price to be agreed upon, not exceeding 25 cents for each musket, since purchased by the War Department for \$50,000.

J. B. Hyde, Dec., 1846.-For the right to make and use Hales's patented war rocket to

an unlimited extent for the military service, \$10,000.

S. Mower & W. H. Scoville, attorneys of P. W. Gates, Sept. 5, 1848.—For the right to make and use in all establishments of the ordnance department Gates's patent dies for cutting screws, \$750.

Loug's Bridge Patent .- For the Bridge Patent privilege there has been paid \$850 00.

Mitchell's Screw Pile .- For Sand Key Lighthouse, \$1,700 00.

Mitchell's Screw Pile .- For Brandywine Lighthouse and Ice-breaker, \$2,400 00.

Boettcher's Fuze. Stevens's Shell.

List of Patents purchased and used in the Navy of the United States.

Stevens's "Cut-off."-For right to use two on Mississippi or other steamer during continuance of patent, \$2,500; for right to use on Saranac, \$2,700-total, \$5,200.

lic service, but I do not hesitate to say, that if it has been the practice of Congress to grant such rewards or compensation, Dr. Morton's claim is fairly entitled to the most liberal consideration.

Very respectfully, your obedient servant,

C. M. CONRAD, Secretary of War.

Hon. FREDERICK P. STANTON, Chairman Committee on Naval Affairs, House of Reps.

NAVY DEPARTMENT, BUREAU OF MEDICINE AND SURGERY, June 29, 1852.

SIR: I have had the honor to receive your letter of yesterday's date, in relation to the memorial of Dr. W. T. G. Morton, asking of Congress remuneration for the discovery of the anæsthetic properties of sulphuric ether, and calling upon me for a statement as to the basis on which the claim is founded, with an estimate of the amount to which,

Sickell & Cook's "Cut-off"-For right to use on Michigan, \$3,000; on Water Witch, For ight to use on Michigan, \$5,000; on Water Witch, \$750; on General Taylor, \$500; on Powhatan, \$6,681 25; on San Jacinto, \$4,418; on Fulton, \$1,780 98; on Princeton, \$2,700; on Alleghany, \$3,927—total, \$23,757 23.

George W. Taylor's "Marine Camels"—For one set for first-class sloop-of-war, with right to use said camels during continuance of patent, \$27,500—total, \$27,500.

West & Thompson's "Clasp Coupling"—For right to use on Susquehanna, Saranac, San Jacinto, and Powhatan, \$1 25 per inch diameter of attached vessel.

Worthington & Baker's "Steam Pump."—For one for San Jacinto, \$500; two for Powhatan, \$100, two for Pow

hatan at \$500, \$1,000; two for Princeton at \$600, \$1,200; two for Alleghany at \$600, \$1,200; one for Water Witch, \$400; one for Vixen, \$400; one for Fulton, \$500; two for Mississippi, \$1,100; two for Saranac, \$1,000; two for Susquehanna, \$1,000; article manufactured and patent included in each case. Total, \$8,300.

Worthington & Baker's "Percussion Water Gauge."-For three for Princeton at \$80, \$240; three for Alleghany at \$80, \$240; four for Powhatan at \$60, \$240; four for Mississippi at \$60, \$240; one for Water Witch, \$60; one for Vixen, \$60; two for Fulton at \$60, \$120; three for Saranac at \$60, \$180; article manufactured and patent included in

each case. Total, \$1,380.

Copeland's "Self acting Blow."—For right to use and make for Fulton, San Jacinto, and Powhatan, \$1,270; for Vixen, \$144; for Saranac, \$480—total, \$1,894.

Seewell's "Salinometers."-For seven for Alleghany at \$75, \$525; seven for Princeton at \$75, \$525; four for Susquehanna at \$75, \$300; four for Powhatan at \$75, \$300; three for Saranac at \$75, \$225; four for Fulton at \$75, \$300; one for Water Witch, \$75; one for Vixen, \$75; four for Mississippi at \$75, \$300; three for Water Witch, \$75; one for Wixen, \$75; four for Mississippi at \$75, \$300; three for San Jacinto at 75, \$225; article manufactured and patent included in each case. Total, \$2,850.

Allen & Noyes's "Metallic Packing"—For right to use on Powhatan, Mississippi, and Michigan, \$3,400; on Saranac, \$1,250; on Princeton, \$900; on Alleghany, \$900; on Water Witch, \$700; on Vixen, \$700—total, \$7,850.

Pirsson's "Condenser."—For right to use on Alleghany, inclusive of his personal attend-

ance while manufacturing, \$1,000-total, \$1,000.

Lamb & Summer's "Sheet flue Boiler."-For right to make and use on Princeton and Alleghany, \$5,085; on Water Witch and Vixen, \$1,800-total, \$6,885. B. Crawford's "Steam Thermometer."-For one to be used at the Foundry, Washington

Navy Yard, inclusive of patent, \$100-total, \$100.

Lt. Hunter's "Submerged Wheel."-For right to use on Alleghany, (not now used.)

\$10,320-total, \$10,320.

Francis's "Life Boat"-For one for Mississippi, \$520; one for Vandalia, \$520; one for Vincennes, \$520; one for Saranac, \$540; one for Alleghany, \$540; one for Copper Cutter, \$540; one Dingy for Washington Yard, \$50; one Dingy, \$126; one Dingy, for Alleghany, \$126; one Copper Cutter, \$540; manufactured article and patent included in each case. Total, \$4,022.

in my opinion, he is entitled, on the score of the benefits and advan-

tages resulting from its use in the naval service.

As the views of the Bureau in regard to the importance of this discovery have been already expressed in a communication to Dr. Morton, I beg leave to extract so much of it as relates to this branch of the subject:

"In reply to your inquiry as to the importance attached to the late discovery of etherization, by the Medical Corps of the Navy, it gives me pleasure to express the high sense they entertain of its utility, not only in surgical practice, but as a powerful agent in many painful affections which have resisted the ordinary remedies. This opinion is strengthened by the concurrent testimony of the ablest civil practitioners of our own country, with the emphatic endorsement of its value by the best

British and continental surgeons.

"The gist of this discovery consists in finding that nervous perception is suspended under the influence of the ethereal inhalation; and while suspended, that the patient is unconscious of pain under the operation of the knife. In addition to the great benefit derived from its use in alleviating pain, it has a decided effect in diminishing mortality. Its advantage in this respect appears to be in saving the system from the severe shock and nervous exhaustion which attend most of the graver surgical operations, and which of themselves often prove fatal.

"It dispels the fear of pain which formerly prevented many from submitting to an operation, or induced them to defer it until too late.

"It enables the surgeon, also, to operate coolly and effectually, undisturbed by the cries and struggles of the patient, which sometimes unnerve the steadiest hand, and render abortive the best-directed efforts."

In regard to the grounds on which Dr. Morton bases his claim to pecuniary remuneration from the Government, I would state, that from the peculiar nature of the discovery, it is impossible to protect the inventor in the extensive advantage of it by letters patent. The novelty of the discovery consists in the new application of an old remedial agent, and the privilege of using it, on the part of the profession at large, cannot be practically curtailed by statutory enactment. The inventor is thus deprived of the pecuniary advantages of his discovery, and is justified in appealing to the government, which also largely avails itself of the benefits derived from it, for relief.

It will be difficult to estimate the amount which the inventor may reasonably ask of the Government in consideration of the advantages attending its use in the two services. For the reasons above mentioned, the cost of the ether itself cannot enter as an element into the calculation, and the fairest estimate, I conceive, might be more nearly approximated by the amount one would be willing to give to be rescued from impending death, or to be relieved from urgent and intolerable pain.

I would express the opinion, however, that the sum of one hundred thousand dollars proposed by the Select Committee of the House of Representatives as a compensation to the inventor, is nothing more

than a fair equivalent for the immense advantage resulting to the Government and country from this important discovery.

I am, very respectfully, your obedient servant,

THOS, HARRIS,

Chief Bureau of Medicine and Surgery.

Hon. Wm. A. GRAHAM, Secretary of the Navy.

WEST POINT, NEW YORK, February 14, 1852.

Both ether and chloroform are used as æsthetic agents in the army. I am, sir, very respectfully, your obedient servant,

JOHN W. CUYLER,

Surgeon U. S. A.

Hon. W. H. Bissell, Chairman, &c.

St. Louis, Mo., February 12, 1852.

Ether was first used by the army early in 1847, during the Mexican war, more particularly on General Scott's line. As at that period a complicated and fragile inhalator was employed for its use, of the number of instruments sent to the army, two, intended for the Rio Grande line, were broken in the transportation; hence the ether was little used if at all on that line. The chloroform was early introduced in the army, not soon enough to have had experience of it or chloric ether during the war. It is now one of the principal articles of our medical supplies, and is in general use.

The chloroform is as highly esteemed by the medical officers of the army and navy as by the surgeons in general practice; it is certainly an inestimable boon to suffering humanity. To my knowledge no important surgical operation, including reduction of dislocations, fractures,

&c., is performed in the army without its being employed.

I have the honor to be, very respectfully, your obedient servant, E. H. ABADIE,

Asst. Surgeon, U. S. A.

Hon. W. H. Bissell, Chairman, &c.

FORT ADAMS, R. I., February 10, 1852.

I have no doubt their effect is greatly to lessen mortality in surgical operations.

Most respectfully, your obedient servant,

R. S. SATTERLEE,

Surgeon U. S. A.

Hon. W. H. BISSELL, Chairman, &c.

"West Point, N. Y., February 12, 1852."

Says it was introduced into the Mexican war. "I shall consider it the greatest boon of the soldier.

"J. SIMONS, Asst. Surg. U. S. A."

"ATHENS, GEORGIA, February 9, 1852.

"I reply, that in the Navy of the United States, to my knowledge,

both ether and chloroform are used as anæsthetic agents.

"That the discovery is of American origin, and due to Dr. Morton, seems so well established and believed, that it is needless for me to add anything on this head. The memory of such a man should be written in ærea perenes; and it would reflect honor upon his country to reward his labors while living. Such a man can proudly exclaim with the immortal Tycho Broke, 'I have not lived in vain.'

"A. A. FRANKLIN HILL, Asst. Surg. U. S. Army.

"New York, January 3, 1852.

"I would state that sulphuric ether and tincture of chloroform are among the medical supplies furnished for the use of the army.

"T. G. MOWER,
"Surgeon U. S. Army."

"New York, January 31, 1852.

"Chloroform and sulphuric ether are, I believe, furnished generally to the army. * * The effect of these agents is wonderful and most valuable in lessening pain and suffering.

"ROBERT MURRAY, "Asst. Surg. U. S. Army."

"PHILADELPHIA, January 27, 1852.

"And so far as my observation extends, (having witnessed a large number of most painful operations under the influence of ether,) I can but consider the discovery of the properties of these agents as the greatest boon that poor suffering humanity has ever received.

"W. WHEA'TON, "Surgeon U. S. Army."

"FORT WASHINGTON, INDIANA, January 27, 1852.

"Medical officers are supplied with chloroform for the use of the army.

* * I have used it myself.

"LEWIS A. EDWARDS, "Surgeon U. S. Army."

"GERMANTOWN, January 26, 1852.

"Some of these agents are always added to the requisitions of medical surgeons.

"Asst. Surgeon U. S. Army."

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"FORT MOULTRIE, CHARLESTON HARBOR, S. C., February 19, 1852.

"Sulphuric ether was used in the general hospital at Vera Cruz, Mexico, in the summer of 1847. I had charge of that hospital.

"J. B. PORTER, M. D.,
"Surgeon U. S. Army."

PLATTSBURGH, BARRACKS, N. Y.

"I have used ether, as before stated, for many years.
"J. MAKLIN,
"Asst. Surg. U. S. Army."

JEFFERSON BARRACKS, Mo.

"C. A. Finley, Surgeon U. S. Army, uses it and says: "As an alleviator of human suffering, I consider it the most important discovery that has been made since the days of Jenner."

FORT MEADE, FLORIDA.

Jona. Letturman, Assistant Surgeon U. S. Army, says he uses them in "diseases involving the nervous system—in allaying the vomiting of an irritable stomach, in cramp colic, and in delirium tremens. Its administration in all was followed by complete relief. In a case of delirium tremens, in which all the ordinary remedies were used without effect, I attribute the saving the patient's life to the administration of chloroform."

FORT SCOTT, MISSOURI.

Jos. K. Barnes, Assistant Surgeon U. S. Army, says, "both ether and chloroform have been, and continue to be, used as anæsthetic agents by myself and others in army practice. The use of chloroform, under my immediate notice, has been confined to its anæsthetic effects during surgical operations of some magnitude, in which freedom from pain on the part of the patient was considered conducive to safety and celerity in operating. No medical officer is likely to be without them."

FORT DODGE, IOWA.

Charles C. Keeney, assistant surgeon U.S. Army, says, "ether and chloroform are both used as anæsthetic agents in the army. They are used to a great extent in neuralgic diseases, and in amputations of the extremities, and extirpation of various tumors—all with remarkable good effect in annulling sensation and voluntary motion. Where I have been stationed they have been used to a great extent."

FORT RIPLEY, MINNESOTA TERRITORY.

J. Frazier Head, Assistant Surgeon U. S. Army, uses them, and says, "as in many important operations in surgery the nervous shock,

resulting from the pain experienced, is an element of great importance in determining the issue of the case, an agent which removes this element with comparative safety, and no bad influence to counterbalance this advantage, cannot fail to diminish the mortality attendant upon such operations."

U. S. NAVAL HOSPITAL, PORTSMOUTH, VA.

N. C. Barrabino, Surgeon U. S. Navy, says, ether and chloroform are used both in the Army and Navy, and is decidedly of the opinion that their use lessens mortality.

FORT McIntosh, Loredo, Texas.

G. Pierce, Assistant Surgeon U. S. Army, uses them, and says, "I am inclined to form a very high opinion of chloroform as a remedial agent."

FORT WEBSTER, NEW MEXICO, May 27, 1852.

Sir: It gives me pleasure, in compliance with your request, to enclose to you the accompanying table. My experience in the larger amputations is, you will perceive, small, but favorable in the highest degree to the good effects of etherization. Wishing you success,

I am, very respectfully, your obedient servant,

WILLIAM A. HAMMOND, Asst. Surgeon U. S. A.

Dr. W. T. G. MORTON, Washington D. C.

"FORT DUNCAN, TEXAS.

"All my experience regarding anæsthetic agents has been in parturition, and I can assure you that the effect has always exceeded my most sanguine hopes.

"GEO. E. COOPER,

"Asst. Surgeon U. S. A.

BALTIMORE, February 2, 1852.

That the discovery of an agent which assuages or annihilates the severe pain often experienced in diseases, necessarily inflicted to a greater or less degree in operations on the human body, and, generally, incident to the condition of the female in the act of parturition, should, at the very first blush, commend itself to the acceptance of all mankind; and that the discoverer of such an agent should be regarded as having conferred the highest earthly boon on afflicted humanity, are propositions too obvious to need the slightest argument to enforce them.

Whether ether or chloroform is used in the Army for anæsthetic purposes, I have no means of knowing, but it is certainly so used in the

practice of the Navy.

I am, sir, respectfully, your obedient servant,

J. BEALE, M. D., nan, &c. Surgeon U. S. N.

To Hon. W. H. BISSELL, Chairman, &c.

NAVAL RENDEZVOUS, NEW YORK, February 7, 1852.

By most of the medical profession these agents are highly appreciated, and it is believed that Mr. Morton, who made public his discovery of the anæsthetic power of ether, is deserving a public reward.

I have the honor to be, very respectfully,

Your obedient servant,

D. S. EDWARDS,

Hon. W. H. Bissell, Chairman, &c.

Surgeon U. S. N.

"ERIE, PENN., January 30, 1852.

"I should hold myself bound to use sometimes the one, sometimes the other, in various conditions of disease and injury.

"WM. MAXWELL WOOD,

"Surgeon U. S. Navy."

"Norfolk, February 4, 1852.

"Chloroform or sulphuric ether are used in the naval service as an anæsthetic agent.

"They are principally used, in the naval service, to lessen pain, and enable a timid or excitable patient to undergo an operation.

"JAMES CORNICK,

"Surgeon U. S. Navy."

"PHILADELPHIA.

"That they are used in the Army and Navy. I think they diminish mortality.
"DANIEL EGBERT,
"Surgeon U. S. Navy."

"PHILADELPHIA.

"I have used chloroform as an anæsthetic agent in my practice in the Navy.

"J. HOPKINSON, U. S. N."

U. S. SHIP PENNSYLVANIA, NORFOLK, VA.

D. B. Phillips, assistant surgeon U. S. Navy, uses them, and speaks of them in the highest terms.

"ANNAPOLIS, MD.

"My experience has been as yet limited to some sixteen surgical cases. In preventing the sufferings of surgical operations, I consider chloric ether entitled to rank as the crowning medical discovery of the day. The cases in which I used it were for the removal of cancerous breasts and large tumors, situated in delicate parts. I should strenuously recommend its introduction on board of our vessels of war.

"NINIAN PINKNEY,

"Surgeon U. S. Navy."

"U. S. NAVAL HOSPITAL, CHELSEA.

"They are both used as an esthetic agents in the Navy. "S. RUDENSTEIN,

"U. S Navy."

"U. S. SHIP PENNSYLVANIA, NORFOLK, VA.

"Chloroform is used in the Navy. Its use has been confined to amputations and other painful and protracted surgical operations, and with decided benefit.

"D. B. PHILLIPS,

"Asst. Surgeon U. S. Navy."

"PHILADELPHIA.

"Ether and chloroform are both employed as anæsthetic agents in the U. S. Navy. Diminish mortality in a very notable proportion. "JOHN O'CONNOR BARCLAY,

"P. A. Surgeon U. S. Navy."

"U. S. NAVY YARD, GOSPORT, VA.

"Samuel Barrington, surgeon, U. S. N., says they are used in the Army and Navy."

"U. S. STEAM FRIGATE SAN JACINTO, GOSPORT, VA.

"I have witnessed the use of ether and chloroform as anæsthetic agents in the navy. These agents have been very generally employed in a great variety of cases, and with favorable effect.

"JOHN H. WRIGHT,
"Passed Asst. Surgeon U. S. Navy."

"U. S. NAVAL RENDEZVOUS, BOSTON, January 30, 1852.

"I have seen chloroform used in the navy. * * I would use it in all surgical operations when it was desirable to prevent pain. "GEO. MALTSBY, U. S. N."

"U. S. MARINE HOSPITAL, ST. LOUIS.

"My impression is, that they are used in the army and navy to a considerable extent, my impression being derived from an acquaintance with many of the medical staff of those branches of the public service, from their publications in the medical journals of the country, and from their known disposition to keep pace with the progress of science. They are regarded as one of the greatest gifts that science could lay on the altar of humanity. They have now been used on perhapr millions of persons, indiscriminately, in both hemispheres.

"CHAS. A. POPE, U. S. N."

"U. S. MARINE HOSPITAL, NEW ORLEANS, Feb. 17, 1852.

"As regards the use of anæsthetic agents, we have invariably employed chloroform in operations; also for perineal section, for stricture of the urethra, and minor surgery, without any unpleasant results, and I think with more favorable convalescence.

"P. B. McKELVEY, "Principal Physician and Surgeon."

Dr. J. H. Hopkinson, U. S. Navy, uses chloroform.

Wm. Lowber, U. S. Navy, says, ether and chloroform is used.

John H. Wright, passed assistant surgeon U. S. Navy, uses them.

D. B. Phillips, assistant surgeon U. S. Navy, has used them.

John L. Fox, surgeon U. S. Naval Hospital, Chelsea, says, he has used them.

John L. Burtt, U. S. N., U. S. Naval Hospital, N. Yi, uses chloroform.

Geo. Blacknall, surg. U. S. N., Norfolk, Va., says, they are used.

Wm. A. Nelson, M. D., U. S. Navy, says, it is used in the navy.

D. S. Edwards, surgeon U. S. Navy, says, ether and chloroform are used in the navy.

Charles S. Tripler, surgeon U. S. A., Fort Gratiot, Mich., uses them.

- R. O. Wood, surgeon U. S. A., says, it has been used in the navy.
- A. S. Wotherspoon, assistant surgeon U. S. Army—Surgeon General's office—bears testimony to its high value.

Josiah Simpson, assistant surgeon U. S. Army, Fort Wood, New York harbor, uses ether.

Dr. Macklin, assistant surgeon U. S. Army, uses ether.

L. D. Williams, Havre de Grace, says, anæsthetic agents are used.

Ebenezer Swift, surgeon U. S., Fort Martin Scott, Texas, uses anæsthetic agents.

Dr. J. N. Schoolfield, Marine Hospital, Norfolk, Va., uses anæsthetic agents.

Dr. Henry S. Leveret, U. S. Marine Hospital, Mobile, uses anæsthetic agents.

Dr. William Ingalls, U. S. Marine Hospital, Chelsea, Massachusetts, uses anæsthetic agents.

Dr. M. L. Hewitt, U. S. Marine Hospital, Cleaveland, Ohio, uses them.

Alexander H. Hassier, Texas, assistant surgeon U. S. Army, uses anæsthetic agents.

Thomas H. Williams, assistant surgeon U. S. Army, Fort North, Texas, speaks highly of them.

T. C. Madison, U. S. Army, uses anæsthetic agents.

To the honorable the Senate and House of Representatives of the United States in Congress assembled.

The undersigned hereby testify to your honorable body, that in their opinion Dr. William T. G. Morton first proved to the world that ether would produce insensibility to the pain of surgical operations, and that it could be used with safety. In their opinion, his fellow men owe a debt to him for this knowledge. Wherefore they respectfully ask a recognition by Congress of his services to his country and mankind.

JOHN C. WARREN, M. D., Senior Surgeon Massachusetts Gencral Hospital, and late President American Medical Society, and Emeritus Professor of Anatomy of Harvard University.

GEORGE HAYWARD, M. D., President Massachusetts Medical Society, and Surgeon Massachusetts General Hospital.

S. D. TOWNSEND, M. D., Surgeon Mass. Gen. Hospital. J. MASON WARREN, M. D., "" "" ""

S. PARKMAN, M. D., " " "

HENRY J. BIGELOW, M. D., Surgeon Massachusetts General Hospital, and Professor of Surgery Harvard University.

HENRY S. CLARK, M. D., Surgeon Massachusetts General Hospital, and City Physician.

JACOB BIGELOW, M. D., Professor Materia Medica Harvard University, and President of the American Academy of Arts and Sciences, and Physician to Massachusetts General Hospital.

OLIVER W. HOLMES, M. D., Professor of Anatomy Harvard University.

HENRY I. BOWDITCH, M. D., Physician to Mass. Gen. Hospital. D. HUMPHREYS STORER, M. D., """

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L. B. Morse,
Charles A. Davis,
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Geo. W. Sanborn, Wm. D. Lamb,

James Howarth,

Thos. R. Boutelle, Levi Pillsbury, T. W. Wadsworth,

Jas. L. Hunt, Winslow Warren,

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Benjamin Haskell, Lemuel Gott,

Henry Bigelow,

Simon Whitney,

Francis Leland,

Daniel Holt, Daniel Mowe, J. W. Scribner.

Lawrence.

David Dana, J. H. Morse.

South Andover.

W. H. Kimball.

Fitchburg.

W. M. Barrett, Henry M. Linrab.

Plymouth.

Benjamin Hubbard, Timothy Gordon.

Dedham.

H. F. Spear.

Hingham.

Robt. T. P. Fiske.

Quincy.

W. Goddard.

Danvers.

David A. Grosvenor, George Osgood.

Marblehead.

Daniel Gill.

Beverly.

Ingalls Kittredge.

Gloucester.

Geo. W. Smith.

Rockport.

Oscar D. Abbott.

Newton.

Cyrus K. Bartlet.

Framingham.

Allston W. Whitney.

Milford.

Theodore O. Cornish.

[Extract of a letter from John Watson, M. D.]

New York Hospital, January 10, 1852.

The wonderful action of ether and the other anæsthetics in alleviating suffering, and in overcoming spasm and muscular resistance during the most protracted, difficult, and delicate surgical membulations, is sufficient to place them among the most useful discoveries that ever have been effected, and to entitle Mr. Morton, who first demonstrated the anæsthetic properties and use of sulphuric ether, to the gratitude of his countrymen, and to give him rank among the benefactors of the human race.

I remain, with becoming respect,

GEORGE NEWBOLD, Esq.

JOHN WATSON.

[Extract of a letter from Henry 1. Bowditch, Physician of the Massachusetts General Hospital.]

Boston, January 4, 1852.

I presume that the discovery of the anæsthetic properties of ether, and its practical application to medicine, will take a rank quite equal to that of vaccination. To no one does the world owe so much for this practical application, as to Dr. Morton. In fact I am fully convinced that had it not been for the boldness of that gentleman, the world to the present hour would have been ignorant of these peculiar adaptations of ether to alleviate human suffering. I say boldness now. In former times, however, I said rashness; for I believe I may say, without fear of contradiction, that the medical profession, as a body, would have feared death as the result, from experiments such as are now made daily without the least fear. Dr. Morton has convinced us from error. Doubtless he received suggestions from other similar experiments, made by several individuals, but to his indomitable perseverance do we finally owe all the essential good which the discoverer has bestowed on man.

I hope therefore that Dr. Morton will receive a tribute of respect from Congress, that shall be commensurate with the great benefits that he has bestowed upon the nation.

I remain, very respectfully, yours,

Hon. W. H. BISSELL.

HENRY I. BOWDITCH.

[Extract of a letter from Henry J. Bigelow, Professor in Harvard University, and Surgeon in Massachusetts General Hospital.]

Boston, January 3, 1852.

I trust that Dr. Morton will now at last receive a substantial and liberal return for his discovery, that ether can annul pain; 1, with safety—with less risk, for example, than everybody daily encounters either in walking or riding; 2, with certainty, in every case.

I have the honor to be, respectfully, your obedient servant, HENRY J. BIGELOW.

W. H. BISSELL, Chairman, &c.

[Extract of a letter from James Jackson, M. D., Professor Emeritus of Theory and Practice of Physic in the University at Cambridge, Honorary Member of the Royal Medico-Chirurgical Society of London, &c.]

Boston, January 5, 1852.

I have, nevertheless, watched the new use of ether and chloroform with great interest from the first annunciation of this discovery by Dr. Morton; and I will say, in general, that it would be difficult to exaggerate the benefits of these anæsthetic agents.

The great and undoubted benefits of ether are shown in surgical and obstetric practice; and I believe these are such as to entitle the discoverer of its good effects, when employed by inhalation, to a very

large reward.

I am, sir, very respectfully, your obedient servant, Hon. W. H. Bissell. JAMES JACKSON.

In a communication to a former committee of the House, Dr. Jack-

son says:

"In my opinion, Dr. Morton is entitled to a grant from Congress, for the Ether discovery, more than any and all other persons in the world."

Extract of a letter from Richard Girdler, M. D.]
BOSTON, January 27, 1852.

I was present at those operations when ether was first administered at the hospital; saw its effects with admiration and astonishment, and am witness to its successful application almost every day; and hope the committee will report favorably upon the just claims of Wm. T. G. Morton, who, I believe, is entitled to the merit of the discovery, and consequently should receive a fitting reward.

Very respectfully, sir, your obedient servant, RICHARD GIRDLER,

Superintendent Massachusetts General Hospital.

Hon. W. H. BISSELL.

[Extract of a letter from George Hayward, M. D., Professor of Harvard University, and Surgeon in Massachusetts General Hospital.]

Boston, January 8, 1852.

I cannot close this letter without saying, that I regard sulphuric ether, the agent first used by Dr. Morton, as by far the best anæsthetic agent; that I believe the world are indebted to him for its introduction into practice, by proving by actual experiment what was not before known or generally believed, that it could be inhaled with safety.

I certainly regard this discovery as one of the greatest of the age, a lithink that Dr. Morton is entitled to a liberal grant from our country for the benefit that he has conferred on the human race.

1 am, with much respect, your obedient servant,

GEORGE HAYWARD.

Hon. W. H. BISSELL.

[Extract of a letter from Thomas P. Jackson.]

Boston, February 4, 1852.

I consider the discovery and introduction of sulphuric ether as an anæsthetic agent to be second to no discovery in medical science, not even to the discovery of vaccination, and that we are solely indebted

for its introduction by Dr. William T. G. Morton.

My opinion is that no compensation Congress can confer on Doctor Morton will equal his deserts, and I really hope that for once a deserving man may receive his recompense during his life, instead of having a monument erected over his grave. I would say, in conclusion, that I have not the slightest acquaintance with Dr. Morton, and that I believe it is the general wish of the profession in this vicinity that Doctor Morton shall receive some remuneration for the benefits he has conferred on suffering humanity.

Yours, respectfully,

THOMAS P. JACKSON, M. D.

Hon. WILLIAM H. BISSELL.

[Extract of a letter from Dr. Putnam.]

Boston, February 14, 1852.

In regard to the estimate in which I hold it, (ether,) I cannot, perhaps, give a more satisfactory proof, than by stating that, immediately after my first experiments, I insisted on Dr. Morton's acceptance of a small sum of money in acknowledgment of my personal obligation to him, and as an earnest of what I considered to be his due from the whole community.

With great respect, I am, yours,

CHARLES G. PUTNAM, M. D.

To the COMMITTEE.

[Extract of a letter from Augustus A. Gould, M. D.]

Boston, January 15, 1852.

I cannot but hope that Congress will do something noble in this case. Other nations have already bestowed honors and emoluments upon those they have deemed entitled, in testimonial of their appreciation of this, the greatest boon which has yet been granted to the keenest sufferings of mankind. And it is not seemly that our own nation should pass by in silence one of the greatest and most universally applicable

discoveries which the world can boast of. The person or persons in-

strumental in bestowing it deserve substantial reward.

I have happened to know every step in the early introduction of the use of ether as an anæsthetic agent. And I am familiar with the odium, the denunciations, and the persecutions, and threatened persecutions which were so liberally showered at its introduction. They came from honest men, whose experience had led them to apprehend serious danger. But with firmness of purpose, disregard of threats, and no lack or stint of expense, the demonstration was soon complete, and all rational opposition has long since been silent; and now it is not only a subject for national pride and national gratitude, but it commands and receives the gratitude of the world.

Very respectfully, your obedient servant,

AUGUSTUS A. GOULD.

Hon. W. H. BISSELL.

[Extract of a letter from Albion S. Dudley, M. D.]

Boston, February 3, 1852.

Dr. Morton certainly was the first in this city to reveal the anæsthetic effects of the sulphuric ether to the public, and successfully introduce it into the Massachusetts Medical College, to my certain knowledge.

I have the honor to be, yours, respectfully,

ALBION'S. DUDLEY.

To the Hon. W. H. BISSELL.

[Extract of a letter from A. L. Peirson, M. D.]
Salem, January 17, 1852.

I have toiled through five-and-thirty years of medical, and especially surgical practice, in a dense population, during most of the time in conscious need of some pain-destroying remedy, and I hail the discovery of the application of the properties of ether with devout gratitude to a beneficent Creator, who has vouchsafed such a blessing to suffering humanity; and with sincere thankfulness to Dr. Morton as being the efficient and fortunate agent, by whose means it has been placed in the hands of the medical profession. For although the inhalation of ether, to produce intoxication, may not have been a new idea previous to October, 1846, yet Dr. Morton, at that time, partially demonstrated its safety, utility, and applicability, in making surgical operations painless, and was the procuring cause of its being now employed by all classes of medical practitioners, in taking away that dread of human nature—

I have the honor to subscribe myself, very respectfully,
A. L. PEIRSON.

Hon. W. H. BISSELL.

[Letter from J. F. May, Professor of Surgery National Medical College, Washington.]

Washington, February 10, 1852.

SIR: I have received your circular requesting of me an answer to the following inquiries:

1st. Is ether or chloroform used as an anæsthetic agent in your in-

stitution?

2d. If used, to what extent, in what classes of diseases, or of operations, and with what effect?

3d. What, in your opinion, is their effect in diminishing mortality? 4th. To what extent, in what classes of cases, and with what result

are they used in private practice in your vicinity?

5th. In what appreciation are they held by the medical faculty within your knowledge?

I reply:

1st. Chloric ether is always used by me and my colleagues, as an anæsthetic agent in every operation of any importance that is performed in the Washington Infirmary, of which institution I am one of

the surgeons.

2d. For more than three years I have constantly used it, both in hospital and in private practice, and it has never in a single instance disappointed me in producing insensibility to pain, and I have never found its administration to be attended or followed by any serieus result. I have given it at all ages, from the tender infant to the old and infirm man, and from a few moments to more than an hour at a time. I have performed under its influence many of the most important and capital operations of surgery; among which I may mention lithotomy, strangulated hernia, the removal of tumors from various regions, the different amputations of both the upper and lower extremities, from the removal

of a finger to disarticulation of the hip joint, &c.

od. I am perfectly convinced that the use of anæsthetic agents has greatly diminished the mortality of surgical operations, and I am prepared to say further, that I would almost as soon think of amputating a limb without previously compressing its principal artery, as to perform a difficult and dangerous operation without first putting the patient in an anæsthetic state. I consider it, in fact, so important an element to the success of the surgeon in severe and formidable operations, by preventing all shock to the system, that I think he ought to decline any operation of magnitude and danger, should he meet with a refusal on the part of the patient to be subjected to its influence. But fortunately there are few who are not only willing but anxious to be soothed by the magic spell which, to the victim, robs surgery of nearly all its terrors, and to the surgeon brings pleasure, from the knowledge that he inflicts no pain.

4th. I believe that all important surgical operations in private practice in this vicinity are performed under anæsthetic influence, and with

the results that I have already mentioned.

5th. I believe that the medical faculty throughout the civilized world, where anæsthesia has been introduced, consider it to be one of the greatest boons that has ever been given to suffering man; and believing Dr. Morton to be its discoverer, I trust he will receive from the Government a compensation commensurate with the immense benefit it has conferred upon the human race.

I have the honor to be, very respectfully, &c.,
Hon. W. H. BISSELL. JNO. FRED'K MAY.

[Extract of a letter from Alex. H. Steevens, M. D.]

NEW YORK, January 5, 1852.

Without the slightest knowledge of Dr. Morton, or of any one connected, or claiming to be connected with this discovery, and without assuming that he is mainly the discoverer, which yet I believe, I take leave to state that the claim of scientific discoverers to reward is a strong one.

The community is taxed by patent rights for inventions to the amount of many millions annually. The men of science paying themselves a part of these taxes, and bringing to light, by their unpaid labors, scientific discoveries from which these inventions in a great measure take their rise, are left entirely, in this country, without any reward whatsoever. In Europe they are rewarded, besides that they are supported by salarles attached to their membership of scientific institutions.

In view of these considerations, and looking not only to what is just as between science and government, but what is, in a very high degree and altogether beyond the appreciation of unlearned men, expedient, as respects the interest of the government, liberal rewards should be

given for unpatented discoveries.

With very great respect, I am, very truly, your obedient servant, The Hon. W. H. BISSELL. ALEX. H. STEEVENS.

P. S. From an official connection with the three great hospitals in this city, embracing about 3,000 patients, I am enabled to state that anæsthetic agents are generally used in puerperal cases, in painful chronic diseases, in the reduction of fractures and dislocations, and in other capital surgical operations, many of which are rendered more successful, and not a few only practicable by their use. I consider it the greatest discovery in medicine since that of Jenner. It is to the healing art, what steam navigation, electro-magnetism, and railroad traveling, are to commercial and social communications.

A. H. S.

[Extract of a letter from Hugh H. McGuire, M. D.]

WINCHESTER, VA.

I regard the discovery of anæsthetic agents the most important discovery made in surgery for the last century. It is also entirely American; for although attempts have been made for a long time to destroy

sensibility to surgical operations, no approximation was made to it, until it was discovered in Boston that sulphuric ether would produce total insensibility. Now it has been the practice in all enlightened countries to reward important discoveries in a very liberal manner; I do hope that an American Congress will not fail to follow the example. The use of these agents have become so common and general throughout Europe, that a late distinguished Professor of Philadelphia, during a visit to Europe, was constantly asked, if it was possible any surgeons in America could be found opposed to them. I have no hesitation in stating that not only is pain avoided, but many lives saved by their use, for the nervous shock, in consequence of serious operations, not unfrequently ends in death. This is avoided by anæsthesia.

It would be just and proper to make him a liberal pension for it. It would not only be an incentive and stimulus to further discoveries in this extensive field of science, but redound to the credit of the Govern-

ment, here and abroad.

Very truly, your friend, HUGH H. McGUIRE,

Hon. CHAS. J. FAULKNER.

Prof. Surgery.

Jacob Bigelow, M. D., President of the Academy of Arts and Sciences, Professor in Harvard University, and Physician to Massachusetts General Hospital, in a letter to Hon. W. H. Bissell, says:

"It is considered by myself, and by the more intelligent part of my medical friends, as the most important medical discovery of the present age."

In an article published in the Medical and Surgical Journal of July

7, 1847, he says:

"In the case of Dr. Jackson, if he did make the discovery in 1842, as asserted, or even later, he stands accountable for the mass of human misery which he has permitted his fellow-creatures to undergo, from the time when he made his discovery, to the time when Dr. Morton made his. In charity, we prefer to believe, that up to the latter period he had no definite notion of the real power of ether in surgery, having seen no case of its application in that science."

[Letter from Professor Simpson, the discoverer of Chloroform.]

My Dear Sir: I have much pleasure in offering, for your kind acceptance, the accompanying pamphlet. Since it was published we have had various other operations performed here, equally successful. I have a note from Mr. Liston, telling me also of its perfect success in London. Its rapidity and depth are amazing.

In the Monthly Journal of Medical Science for September, I have a long article on etherization, vindicating your claims over those of Jackson. Of course, the great thought is that of producing insensibility, and for that the world is, I think, indebted to you.

I read a paper lately to our society, showing that it was recommended

by Pliny, &c., in old times.

With very great esteem for you, allow me to subscribe myself, Yours, very faithfully,

J. Y. SIMPSON.

Dr. W. T. G. MORTON.

[Extract of a letter from J. Parkman, M. D., of Boston.]

Life may also be saved from the more ready submission of the patients to necessary operations, since they can be assured that they are painless. And inasmuch as pain and spasm do destroy life, it is fair to

presume that agents relieving these must diminish mortality.

In private practice in this city anæsthetic agents are in universal use in all surgical operations, and also in all the operations of midwifery. They are in quite general use in all diseases requiring an antidote to pain and spasm, as one of the means to allay them, and some practitioners use them in all cases of child-birth.

I remain, very respectfully,

J. PARKMAN,

One of the Surgeons of the Muss. Gen. Hospital.

Hon. W. H. BISSELL.

[Extract of a letter from S. D. Townsend, M. D., of Boston.]

It has been used almost daily for diseases of a spasmodic and painful character, and in all surgical operations, with the effect of relieving pain and annihilating perfectly all suffering in surgical operations. I believe it diminishes mortality, by relieving spasmodic diseases, and preventing the severe shock of surgical operations. In private practice it has been used to the same extent, and in the same classes of cases, and with the same result as occurring in the Massachusetts General Hospital, with the addition of cases of midwifery, in which it prevents the sensation of pain, without retarding delivery.

Very respectfully, your obedient servant, S. D. TOWNSEND,

One of the Surgeons of the Mass. Gen. Hospital.

[Extract of a letter from S. Mason Warren, M. D., of Boston.]

Sulphuric ether and strong chloric ether are used at the Massachu-

setts General Hospital. Chloroform is not used.

The above substances are used in almost every surgical operation, and in many diseases attended with severe pain. I have seen them exhibited in more than two thousand cases, including hospital and private practice, and never with any bad result. By preventing the severe

shock to the system in surgical operations, it is probable that they have an influence in diminishing mortality. In surgical operations in private practice, I have used the chloric and sulphuric ethers, principally the former; also in many obstetric cases, and to relieve suffering in painful diseases, often as a substitute for opium; and I believe them to be used by most other practitioners of Boston and the vicinity for the same purposes, and with a satisfactory result.

Very respectfully, yours,

S. MASON WARREN,

One of the Surgeons of the Mass. Gen. Hospital.

Hon. W. H. BISSELL.

[Extract of a letter from John Ware, M. D., of Boston.]

Their most important use is in the practice of midwifery. They are employed very generally in severe, protracted, and dangerous cases. My belief is, from my own experience, and from the concurrent testimony of all practitioners with whose opinions I am conversant, that they not only diminish, and sometimes annihilate, the suffering which is attendant on parturition, but that they lessen also the dread of it, which is so strong a feeling in the minds of females; and further, that they render patients less liable to the subsequent ill effects of severe labors, especially those in which the use of instruments are necessary. I have employed or seen them employed in asthma, in croup, in convulsions of children and adults, in neuralgia, in the spasmodic affections of fever, and in many other cases of a more indefinite character. into the description of which it is not now necessary to your purpose to enter. I have also employed them with signal advantage to alleviate the sufferings which occur toward the close of life, or in the act of death, in patients who have had irrecoverable diseases.

Their introduction is regarded by all practitioners within my circle of acquaintance, whose opinions I should regard as of value, as the most important discovery in practical medicine and surgery which has been

made since that of vaccination by Dr. Jenner.

I am, very respectfully, your obedient servant, Hon. W. H. BISSELL. JOHN WARE.

[Extract of a letter from J. S. Jones, M. D., of Boston.]

In the private practice in my vicinity the use of these anæsthetic agents is quite common in dentistry, in midwifery, and scarcely any operation of surgery is performed without its use. The reduction of dislocations and the adaptation of fractured bones, are materially aided by the effects of ether, besides the freedom from suffering enjoyed by the injured person when under its effects.

Respectfully, yours,

Hon. W. H. BISSELL.

J. S. JONES.

[Extract of a letter from Z. B. Adams, M. D., of Boston.]

It is almost uniformly used, both in public and private practice, in dentistry, in midwifery, and in all surgical operations; also to cause muscular relaxation in the respection of hernia; has been eminently successful in cases of convulsions after delivery, and in alleviating the excruciating pain caused by the passage of calculi through the ureters. It is an exceedingly rare thing to hear of any dangerous or even serious effects from the use of either ether or chloroform. The good effects are almost incalculable.

Very respectfully, your obedient servant,
Hon. W. H. BISSELL. Z. B. ADAMS.

[Extract from a letter written by Dr. John Jeffries, physician to the Massachusetts General Hospital.]

For my opinion of the benefits bestowed upon the world by Dr. Morton, please allow me to refer you to a note addressed by me to the

Hon. R. C. Winthrop:

"Or. Morton, who visits Washington to seek some remuneration from Government for the benefit which he has conferred upon the country by the introduction of sulphuric ether, requests me to express to you my opinion (which I do most unreservedly) that the world is indebted entirely to Dr. Morton for the introduction of this agent to produce insensibility to pain, and that it is a physical blessing not second to any that has been conferred upon suffering humanity.

"I sincerely hope that Dr. Morton will receive some remuneration

for his very great benefaction.

"With high respect, your obedient servant, JOHN JEFFRIES.

"Hon. R. C. WINTHROP,
"Speaker of the House of Representatives."

Oliver W. Holmes, the distinguished poet, and a physician to the Massachusetts General Hospital, held the following language in an

opening address of the Medical College, Boston:

"The knife is searching for disease; the pulleys are dragging back dislocated limbs; nature herself is working out the primal curse, which doomed the tenderest of her creatures to the sharpest of her trials; but the fierce extremity of suffering has been steeped in the waters of forgetfulness, and the deepest furrow in the knotted brow of agony has been smoothed forever."

Again, in a communication to the Hon. Isaac E. Morse, he says:

"It is a notorious and wholly undisputed fact that Dr. Morton in person instituted the first decisive experiments, at the risk of his reputation, and with a courage and perseverance, without which, even had the idea of the possibility of such effects been entertained, the world might have waited centuries or indefinitely before the result was reached.

"It is well known that Dr. Morton, instead of profiting by his discovery, has suffered in mind, body and estate in consequence of the time

and toil he has consecrated to it.

"I have no particular relations with Dr. Morton, and no interest in common with him, to bias me in my opinions and feelings. But, remembering what other countries have done for their public benefactors. and unwilling to believe that a rich and prosperous republic cannot afford and will not incline to indulge its gratitude whenever a proper occasion presents itself, I have addressed you this line to tell you that I think now is the time and this is the man.

"O. W. HOLMES.

"Hon. ISAAC E. MORSE."

[Extract of a letter from Geo. B. Loring, M. D., Salem, Mass.]

It is one month since I had charge of the Marine Hospital, Chelsea. Massachusetts; and any statement based on personal experience must

be founded upon my practice there.

In all operations, in all painful natural processes, in all diseases attended with great local suffering, the intelligent and philanthropic physician avails himself of the great blessing. And while so much suffering is relieved, it cannot be doubted-in fact it is satisfactorily proved, that mortality attending these operations, processes, and diseases,

is materially diminished.

As the interrogatories addressed to me have grown out of an inquiry into the "claims of Wm. T. G. Morton, of Boston, to the merit of the discovery," it may be proper to state to the committee that its credit has been, from the earliest date, almost universally accorded to Dr. Morton by those of the profession who have given it their careful investigation. During its development, the surgeons and officers of the Massachusetts General Hospital examined its merits, under the special guidance of Dr. Morton, and with a full recognition of his sole agency in the practical experiments which were leading to its establishment. And now that those events have passed into history, the Historiæ of the hospital records as a fact fixed by all reliable testimony, that Dr. Morton is the discoverer.

It should be borne in mind that this is the verdict of the immediate locality in which the discovery was made; and any recognition from abroad of Dr. Jackson's claims to it is no more than should be expected from the scientific world towards any pertinacious and untiring claimant holding his high position, be the claims true or false.

Hon. W. H. BISSELL.

GEO. B. LORING.

[Extract from a letter written by Dr. Francis Boott, of London.]

"I was much interested in the discussion of the ether question, and entirely agree with you in your conclusion. I should say, as in the case of the yacht race, 'Morton is first, and Jackson nowhere.' I am

glad to find you are making a gallery of portraits of your benefactors and distinguished medical men, and Morton's should be among them. I still hope Congress will reward him."

Hon. W. H. BISSELL.

[Extract of a letter from S. Paris, M. D., of Greensboro, Alabama.]

The medical faculty appreciate it highly, and seem at a loss to know how they would practise without it, nor could a man be sustained by his medical brethren or the community, who would refuse to use it. In fine, it is to the medical profession the greatest discovery of modern times, hardly excepting quinine.

Very respectfully, S. PARIS.

Hon. W. H. BISSELL.

[Extract of a letter from James Ayer, M. D., of Boston.]

The cases in which they are more especially employed are in nearly all surgical operations where suffering is an attendant; in surgical diseases generally painful, and frequently protracted. They are also used in diseases of a spasmodic character, as cholera, cramps, colic, asthma, and in rheumatism and neuralgia. A great variety of cases in midwifery, as well as hysteria and convulsions, and many other painful diseases which might be added to this list, are very essentially relieved by these remedies.

Your obedient servant,

Hon. W. H. BISSELL.

JAMES AYER.

[Extract of a letter from P. M. Crane, M. D., of East Boston.]

In nearly all the operations of surgery which are likely to be attended with pain, either chloric ether, sulphuric ether, or chloroform are used. So uniform is the belief in their utility, that no surgeon at the present time would do without them. In obstetric practice they are also extensively used where cases occur requiring instrumental interference, but are not much employed in natural labor.

With much respect,

Hon. W. H. BISSELL.

P. M. CRANE.

[Extract of a letter from John H. Dix, M. D., of Boston.]

In all painful operations upon the globe of the eye and its appendages, these agents afford incalculable relief both physically and mentally. The severe operations upon the internal textures of the globe of the eye, not in themselves painful, but requiring for their satisfactory performance absolute immobility of the organ, these agents insure what, in young subjects especially, was hitherto only approximated to.

In the few operations of ophthalmic surgery which endanger life, I find from the use of these agents a diminished tendency to inflammatory

within the cranium, and therefore less hazard to life. In aural surgery, though not frequently required, anæsthetic agents are of great value, chiefly in the removal of morbid growths from the external or internal ear. I believe that no other discovery in the whole range of medicine and surgery (with the exception, perhaps, of vaccination) has in the same time contributed so much to relieve suffering and prolong life.

Yours, respectfully,

Hon. W. H. BISSELL.

JOHN H. DIX.

[Extract of a letter from J. Appleton, M. D., West Newburg, Mass.]

I have lately observed good effect follow the inhalation of chloroform during a paroxysm of severe suffering from dysmenorrhea, in which relief was almost instantaneous.

It is, however, in obstetric practice that I have most frequently used these valuable agents, and I regard their usefulness in this relation as among the most valuable results of their discovery.

Respectfully, yours, &c.,

JOHN APPLETON.

Hon. W. H. BISSELL.

[Extract of a letter from L. B. Morse, M. D., Boston, Mass.]

They are used in most cases of important or capital surgery, in many cases of delirium tremens, tetanus, and similar neuralgic diseases, and in dental surgery; also by some of our medical practitioners in common use in midwifery.

It diminishes mortality in three ways—viz: 1st, in severe surgical operations, by entire relief from nervous excitability and reaction which attend them; 2d. By giving time for the use of the knife and the careful completion of a dangerous operation, in the perfect quietude of the patient; 3d. The rest secured by some patients in certain neuralgic diseases, which if not attained, death is the result.

I am, sir, your obedient servant,

L. B. MORSE.

Hon. W. H. BISSELL.

[Extract of a letter from L. H. Anderson, M.D., Sumterville, Ala.]

I think anæsthetics diminish mortality in two ways: 1st. By preventing the shock of pain on the nervous system; 2d. By securing perfect immobility of the patient, and enabling the surgeon to operate more safely and exactly.

I am, very respectfully, your obedient servant,

L. H. ANDERSON, M. D.

Hon. W. H. BISSELL.

[Extract of a letter from S. Blanding, M. D., Columbia, S. C.]

Its use has induced patients to submit to the knife early, when otherwise they would have resulted fatally.

I consider it one of the most important discoveries of the age in mitigating human suffering, and often in saving life.

I have the honor to be, yours, &c.,

S. BLANDING.

Hon. W. H. BISSELL.

[Extract of a letter from William Ellis, M. D., Oglethorpe, Ga.]

It is my deliberate opinion, founded upon experience, that their effects in diminishing mortality is more than fifty to one, for, if properly administered, the effect is to take away all fear from the patient, and absolutely free the nervous system from irritation, and thereby prevent any interruption in the various organs in performing their functions

naturally, and of course healthily.

In private practice its most happy and beneficial effects is in obstetrics; nothing is or can be of so much value to a woman in labor in proportion to the difficulty attending labor; so is its benefits, and if in no other, in this class of cases alone; it is the greatest discovery in any age of the world for the relief of suffering humanity; deprive me of its benefits, and I should almost, if not altogether, abandon my profession.

Hon. W. H. BISSELL.

WILLIAM ELLIS.

